

DIRECT ACCESS STORAGE DEVICE

(DASD) POLICY

ADMINISTRATIVE - INTERNAL USE ONLY

FAII 1987

OIT 0494-87 LOGGED

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MEMORANDUM FOR: All ADP Control Officers

FROM:

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Edward J. Maloney

Director of Information Technology

SUBJECT:

Office of Information Technology Direct Access Storage

Device (DASD) Policy

- 1. The increasing use of the Office of Information Technology (OIT) computer systems resources has resulted in unprecedented customer demands for on-line storage space (DASD). Our goals are to provide the best possible service at reasonable costs, ensure effective use of on-line storage, and provide a planning procedure for predicting future DASD demands. Your cooperation in this effort will assist OIT in satisfying current and future DASD requirements. We recognize that customers will experience occasional "emergency" requirements for increased on-line storage. Such requirements should be addressed to the Systems Administration Branch, OIT, as they arise, and every effort will be made to accommodate them.
- 2. The Automated Data Processing Control Officers (ADPCOs) are encouraged to review and respond to three monthly reports detailing DASD useage. These reports will include easy to follow instructions and should provide the ADPCOs with information which will allow them to more effectively monitor DASD allocation and useage. Attachment A provides detailed procedures for projecting, requesting and monitoring DASD. Basic policy statements are presented below and apply to all OIT VM and MVS systems:
- a. The OIT office responsible for all customer DASD concerns is the Systems Administration Branch (SAB). Room GA2505 Headquarters (USERID: CSSAIM,
- b. All requests for DASD management services must be approved by the ADPCO or a designated alternate for the component involved.
- c. ADPCOs will be requested annually to provide SAB with the projected amount of DASD required for their component, by system, for a five-year period beginning with Fiscal Year 1988. These requirements should be provided by 1 August of each fiscal year. Components will be allocated DASD for the current fiscal year based on the projection provided by the ADPCO. Projections for future years may be adjusted if submitted two months prior to the beginning of the fiscal year.

- d. Inactive DASD (not used for a period of 90 days) will be considered for archival to tape for storage and deletion from the system upon review by and concurrence of the component ADPCO.
- e. Unused DASD (DASD issued but containing no data within 90 days), excluding 191 (A) disks, will also be considered for deletion from the system upon review by and concurrence of the component ADPCO.
- f. Overallocated DASD (three-cylinders and above), which is less than 30% full and more than 90 days old, should be reduced in size until additional space is required. (This DASD will be identified in the monthly "Effective Use Report" provided to the ADPCOs by SAB).
- g. DASD with invalid owner userids should be transferred to new owners or archived to tape for storage and deleted from the system. (This DASD can be identified by monitoring the monthly "Effective Use Report" provided to the ADPCOs by SAB).
- 3. We solicit your support in making this a successful DASD policy. Our ability to adequately meet our customers DASD requirements depends on you. Please call or visit the Systems Administration Branch, OIT, or send a note to the userid: CSSAIM, if you need further information regarding this policy.

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Director of Information Technology

Attachment: As Stated

ATTACHMENT A IT 0494-87 29 July 1987

OIT Direct Access Storage Device (DASD) Procedures

TABLE OF CONTENTS

- I. Purpose
- II. Policy for Requesting Direct Access Storage Device (DASD)
 - A. Initiating DASD Requests
 - 1. VM Applications
 - a. CSSAIM
 - b. Form4065
 - MVS/JES3 Applications
 - a. SABSHAR
 - b. BATCHREQ
 - B. DASD Allocations
 - 1. VM Applications
 - MVS/JES3 Applications
 - C. DASD Increases
 - D. DASD Decreases/Deletions
 - VM Applications
 - MVS/JES3 Applications
- III. ADPCO Responsibilities for Managing Direct Access Storage Device (DASD)
 - A. DASD Projections
 - B. Managing Current DASD Allocations
 - VM Applications
 - Identifying Inactive Minidisks for Archival to Tape or Deletion

- b. Monitoring Minidisks That Should Be Transferred, Reassigned or Deleted
- c. Monitoring the Monthly Detail Report for Unauthorized Accesses
- d. Approving Minidisk Allocation and Increase Requests

MVS/JES3 Applications

- a. Identifying Inactive Datasets for Archival to Tape
- b. Monitoring Datasets That Should Be Transferred, Reassigned or Deleted
- c. Monitoring the ACF2 Reports for Unauthorized Accesses
- d. Approving Dataset Allocation and Increase Requests

IV. DASD Reports Available to ADPCOs

1. VM Applications

- a. Monthly Report on DASD Allocations vs. DASD Projections
- b. Effective Use Report
- c. Monthly Detail Report
- d. Ad Hoc Reports

MVS/JES3 Applications

- a. Disk Management System (DMS) Report
- b. Archive Report
- V. Points-of-Contact in Systems Administration Branch for Questions/ Problems

I. PURPOSE

The purpose of this document is to establish policy for the Automated Data Processing Control Officers (ADPCOs) and their alternates for projecting, requesting, and managing Direct Access Storage Device (DASD) on the VM and MVS/JES3 systems.

This policy will also assist the ADPCOs in managing current DASD allocations so that over-allocated and/or inactive space can be retrieved by reducing the size, archiving the information to tape, or deleting the allocated space from the system.

The guidelines have been established for the ADPCOs, in coordination with OIT management and the Systems Administration Branch/OIT, and apply to the following VM/MVS systems:

SAFE (Production & Development), CAMS (Production & Development), DESIST (VMT), 4C, and Special Center (SHARE only.)

II. POLICY FOR REQUESTING DASD

The OIT office responsible for processing all DASD requests is the Systems Administration Branch (SAB), Room GA2505, Headquarters, USERID: CSSAIM,

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Any request to SAB concerning minidisk allocations, increases, decreases, deletions, VLINKS, etc., must be approved by the ADPCO or a designated alternate for the component involved. Such requests can be submitted on-line to the userid CSSAIM or in AIM, CReate FORM4065, and should be routed through the appropriate ADPCO or alternate. Requests by phone must be verified via an AIM note to CSSAIM or FORM4065, or with a hard copy Form4065.

Any request to SAB concerning dataset allocations, increases, decreases, deletions, and links to VM/MVS-shared disks must be approved by the ADPCO or a designated alternate for the component involved. Such requests can be submitted on-line to the userid SABSHAR or in AIM, CReate BATCHREQ, and should be routed though the appropriate ADPCO or alternate. Requests by phone must be verified via an AIM note to SABSHAR or BATCHREQ.

A. Initiating DASD Requests

1. VM Applications

DASD requests (new minidisks, increases, decreases, transfers, reassignments, deletions, etc.) can be initiated via AIM or by completing a hard copy Form4065. (The SAB userids, CSSAIM and FORM4065, are monitored continuously.)

- a. <u>CSSAIM</u>: This AIM userid may be used to submit any VM request (minidisk allocations, increases, transfers, deletions, VLINKs, AIM access, etc.) <u>EXCEPT</u> initial access to the system for new userids. (FORM4065 is the AIM virtual used to request initial access for new users.)
 - In AIM, create note or memo to userid CSSAIM via the appropriate ADPCO.

b. Form4065:

- 1) Form4065 is used to request initial access to the VM system as well as minidisk-related services, AIM access, deletions, etc.
 - a) All on-line 4065 requests are routed through the component's appropriate ADPCO or alternate before being sent to SAB.
 - b) In AIM, CReate FORM4065. A menu will appear with a choice of actions including initial

access/change of access, minidisk-related requests, or AIM access.

c) All requests submitted on hard copy Form4065 must be signed by the appropriate ADPCO or designated alternate.

MVS/JES Applications

DASD requests (new dataset allocations, increases, decreases, transfers, deletions, etc.) can be initiated on-line via AIM.

- a. SABSHAR: This AIM userid may be used to submit any request (dataset allocations, increases, transfers, deletions, etc.) for SHARE/STORE packs.
 - 1) In AIM, CReate Note or Memo to SABSHAR via the appropriate ADPCO or alternate.

b. BATCHREQ:

- In AIM, CReate BATCHREQ. A menu will appear with a choice of actions including initial allocations, change of owner, or any ad hoc request.
- 2) All on-line BATCHREQ requests are routed through the component's ADPCO or alternate before being sent to SAB.

B. DASD Allocation

All new user requests and dataset allocations must be approved by the appropriate ADPCO or alternate.

1. VM Applications

- a. All new users are automatically assigned a 1-cylinder "A" disk with an automatic link and AIM access unless other instructions are provided on the Form4065.
 - Some VM applications may require larger initial minidisk allocations. These requirements should be stated on the Form4065.
- b. Requests for large minidisk allocations (10-cylinders and above) should include an appropriate justification for the required space.

2. MVS/JES Applications

a. Requests for large dataset allocations (10-cylinders and above) should include an appropriate justification for the required space.

C. DASD Increases

- 1. All increase requests must be approved by the appropriate ADPCO or alternate to ensure that the minidisk or dataset is at least 70% full.
- 2. If the minidisk or dataset is <u>not</u> 70% full, the owner should submit an increase request through the ADPCO with a justification for the additional space.
- 3. All increase requests will count against the component's DASD projection submitted by the ADPCO for that fiscal year.

D. DASD Decreases/Deletions

1. VM Applications

- a. To effectively monitor over-allocated and inactive minidisks, the ADPCOs are strongly encouraged to utilize the "Effective Use " and "Detail Reports" which are provided by SAB on a monthly basis.
 - 1) Minidisks (3-cylinders and above which are less than 30% full (and more than 90 days old) should be reduced in size until additional space is required. The "Effective Use Report" will be provided monthly for the ADPCOs' review listing the minidisks in this category. The ultimate disposition of the data will be determined by the appropriate ADPCO. Reduced minidisk cylinders will be credited to the component.
 - 2) Inactive minidisks (those accessed only by BACKUP virtuals for a period of 90 days) will be considered for archival to tape and deletion from the system. The "Detail Report" will be provided monthly for the ADPCOs' review listing the minidisks in this category. The ultimate disposition of the data will be determined by the ADPCO. Deleted cylinders from inactive minidisks will be credited to the component.
 - 3) Any unused minidisks (no files), excluding 191 (A) disks, will also be considered for deletion from the system 90 days after the date issued. Reports will be provided for the ADPCOs' review listing the minidisks in this category. The ultimate disposition of the data will be determined by the ADPCO. Deleted cylinders from unused minidisks will be credited to the component.

4) Minidisks with <u>invalid</u> owner userids should be transferred to new owners, or archived to tape and deleted from the system. The ultimate disposition of the data will be determined by the appropriate ADPCO.

2. MVS JES Applications

- a. Inactive datasets (those not accessed for a period of 90 days) are currently being archived to tape for storage. Archived datasets are automatically restored to disk when referenced by users' jobs. Both actions are transparent to the user.
- b. Any unused datasets (no files with 90 days after after the date issued) are currently being archived to tape for storage. Archived datasets are automatically restored to disk when referenced by users' jobs. Both actions are transparent to the user.
- c. Datasets with <u>invalid</u> userids as owners should be transferred to new owners, or archived to tape for storage and deleted from the system. The ultimate disposition of the data will be determined by the appropriate ADPCO.

III. ADPCO RESPONSIBILITIES FOR MANAGING DASD

The ADPCOs (and/or their designated alternates) are responsible for managing DASD for their component. These responsibilities include requesting DASD, monitoring the ownership and accessibility of the DASD, reducing over-allocated space, deleting inactive DASD, and providing DASD projections. The Systems Administration Branch will provide the ADPCOs with consultation, monthly reports, and ad hoc reports on DASD activity, and general information on all DASD-related concerns.

A. DASD Projections

1. The ADPCOs will be requested annually to provide SAB with the projected amount of DASD including any database space (e.g., IDMS, SQL, NOMAD, GIMS) required for their component by system SAFE (Production & Development), CAMS (Production & Development), Special Center (SHARE only), DESIST (VMT), and 4C] for a 5-year period beginning with Fiscal Year 1988. Components will be allocated DASD for the current fiscal year based on the projections provided by the ADPCO. The annual DASD projections will be initiated on 1 August each year. Projections for future years may be adjusted if submitted 2 months prior to the beginning of the fiscal year.

8
ADMINISTRATIVE - INTERNAL USE ONLY

- a) In the event of unforeseen DASD requirements, SAB will handle requests from the ADPCO for immediate allocation extensions on a case-by-case basis.
- 2. SAB will provide the ADPCOs with statistical information on DASD allocations vs. projections for the previous 3 years to assist with future DASD projections.
 - a. SAB personnel will be available to meet annually with each ADPCO, if requested, to coordinate and gather the 5-year DASD projections.
- ADPCOs may submit DASD projections on an online and/or hard-copy form provided by SAB.
 - a. In addition to normal VM DASD requirements, ADPCOs should also be aware of and include future and continuing requirements such as NOMAD, IDMS, SQL, etc.
- 4. ADPCOs will be provided with monthly online reports (see IV., A., 1) to review statistical information showing allocated space vs. amount projected for the current fiscal year.
- B. Managing Current DASD Allocations

Space allocated on DASD that is shared between MVS and VM will be exempt from the following guidelines.

1. VM Applications

- a. The ADPCOs are encouraged to use the "Monthly Detail" and "Effective Use" Reports to monitor minidisk inactivity and over-allocation. Careful monitoring of these reports will ensure the availability of DASD for future unexpected requirements.
 - 1) Any minidisks considered <u>inactive</u> (accessed only by BACKUP virtuals) for a period of 90 days will be considered for archival to tape for storage and deletion from the system. Reports will be prepared for the ADPCO's review listing the minidisks in this category. The ultimate disposition of the data will be determined by the appropriate ADPCO.
 - a) The ADPCO should identify inactive minidisks which belong to users who are on TDY so that SAB can note their status and not include them on the next month's report.

9

- 2) Minidisks issued but not used (no files) within 90 days, excluding 191 (A) disks, will also be considered for deletion from the system. Reports will be provided for the ADPCO's review listing the minidisks in category. The ultimate disposition of the data will be determined by the appropriate ADPCO.
- b. The ADPCOs should monitor DASD ownership to ensure accuracy.
 - Minidisks with <u>invalid</u> userids as owners should be transferred to new owners, or archived to tape for storage and deleted from the system. The ultimate disposition of the data will be determined by the appropriate ADPCO.
 - 2) Minidisks assigned to individuals who have left the component should be transferred, reassigned, or archived to tape and deleted from the system. The ultimate disposition of the data will be determined by the appropriate ADPCO.
- c. The ADPCO's are encouraged to use the "Monthly Detail Report" to monitor any unauthorized accesses to minidisks and report such activity to the Audit & Education Branch/ OIT (Room 5F52, Headquarters, userid: OITSEC).
- d. All requests for increased DASD allocations must be approved by the ADPCO or alternate to validate the additional space requirement. This will allow the ADPCO to better monitor the component's DASD allocations.
 - 1) Increase requests will only be approved if the disk is "critically" full (70% and above), unless appropriate justification for the additional space is provided.

MVS/JES Applications

- a. The ADPCOs are encouraged to use SAB-produced reports to monitor dataset inactivity and over-allocation. Careful monitoring of the reports will ensure the availability of DASD for future unexpected requirements.
 - Datasets considered <u>inactive</u> (not accessed/referenced) for a period of 90 days are currently archived to tape for storage. Archived datasets are automatically restored to disk when referenced by users' jobs. Both actions are transparent to the user.

10
ADMINISTRATIVE - INTERNAL USE ONLY

- 2) Datasets allocated but not used (no data) within 90 days are currently being archived to tape for storage. Archived datasets are automatically restored to disk when referenced by users' jobs. Both actions are transparent to the user.
- b. The ADPCOs are encouraged to monitor dataset ownership to ensure accuracy.
 - Datasets with <u>invalid</u> owner userids should be transferred to new owners, or archived to tape for storage and deleted from the system. The ultimate disposition of the data will be determined by the appropriate ADPCO.
- c. The ADPCOs/ACF2 Administrators are encouraged to use the Access Control Facility 2 (ACF2) reports produced daily to monitor any unauthorized accesses to datasets and report such activity to the OIT Security Officer/Audit & Education Branch/OIT (Room 5F52, Headquarters, USERID: OITSEC).
- d. All requests for increased dataset allocations must be approved by the ADPCO or alternate to validate that additional space is required. This will allow the ADPCO to better monitor the component's DASD allocations.
 - Increase requests will only be approved if the dataset is "critically" full (70% and above), unless appropriate justification for the additional space is provided.

IV. DASD REPORTS AVAILABLE TO ADPCOS

A. VM Applications

1. Monthly Report on DASD Allocations vs. Projections

This report is provided on-line by SAB to the ADPCO for each VM system on a monthly basis to show allocated DASD vs. the amount projected for the current fiscal year.

2. Effective Use Report

This report is used to monitor minidisk space that is over-allocated or empty. It is generated by SAB on a monthly basis and is sent to each ADPCO for action so that over-allocated minidisks can be reduced in size

11
ADMINISTRATIVE - INTERNAL USE ONLY

and empty secondary disks can be deleted from the system until they are needed in the future. Currently available in hard copy, this report will be available on-line this fall.

3. Monthly Detail Report

This report is provided by SAB to the ADPCOs on a monthly basis to detect inactive minidisks and unauthorized accesses. Beginning this fall, this report will be available to each ADPCO on-line.

4. Ad Hoc Reports

These reports are available from SAB upon the ADPCO's request.

- a) Reports include the following categories:
 - -- minidisk listings sorted numerically;
 - -- minidisk listings sorted by ownership (userid);
 - -- minidisk listings sorted by cylinder size;
 - -- minidisk listings sorted by year and/or month
 of issuance;

B. MVS/JES Applications

1. Disk Management System (DMS) Reports

These reports are produced on request and list all current datasets by office, the Data Control Blocks (DCB) information, pack location, tracks allocated, tracks used, creation date, and date last referenced.

Archive Report

This report is produced on request and is used to list MVS DASD datasets that have been archived to cassette tape. The report includes relevant information in the Archive Control File, i.e., dataset name, date archived, DASD volser, space, and cassette number.

V. POINTS-OF-CONTACT IN SAB FOR QUESTIONS/PROBLEMS

The Systems Administration Branch (SAB) is located in Room GA2505. Headquarters, USERID: CSSAIM, and the phone numbers are

12